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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

MARR, et al.

Serial No.: 10/711,767

Filed: October 4, 2004

Atty. File No.: 34090.0273

For: "DEVICES EMPLOYING COLLOIDAL-SIZED PARTICLES"

Group Art Unit: 3746

Examiner: not yet assigned

Confirmation No.: 5766

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Respectfully submitted,

HOLLAND & HART LLP

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3

Complete if Known	
Application Number	10/711,767
Filing Date	October 4, 2004
First Named Inventor	Marr, et al.
Art Unit	3746
Examiner Name	not yet assigned
Attorney Docket Number	34090.0273

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	A	WO-00/17624-A2	03-30-2000	Jung, et al.		

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Sheet 2 of 3

Complete if Known	
Application Number	10/711,767
Filing Date	October 4, 2004
First Named Inventor	Marr, et al.
Group Art Unit	3746
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Attorney Docket Number	34090.0273

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[2]
	B	A. MANZ, C.S. EFFENHAUSER, N. BURGGRAF, D.J. HARRISON, K. SEILER and K. FLURI, "Electroosmotic Pumping and Electrophoretic Separations for Miniaturized Chemical Analysis Systems", *J. Micromech. Microeng.*, 1994, pp. 257-265, **4**, IOP Publishing Ltd., United Kingdom	
	C	M.A. UNGER, H. CHOU, T. THORSEN, A. SCHERER, and S.R. QUAKE, "Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography", *Science*, 7 April 2000, pp. 113-116, **288**, American Association for the Advancement of Science, USA	
	D	D.J. BEEBE, J.S. MOORE, J.M. BAUER, Q. YU, R.H. LIU, C. DEVADOSS and B. JO, "Functional Hydrogel Structures for Autonomous Flow Control Inside Microfluidic Channels", *Nature*, 6 April 2000, pp. 588-590, **404**, Macmillan Magazines Ltd., USA	
	E	Q. YU, J.M. BAUER, J.S. MOORE and D.J. BEEBE, "Responsive Biomimetic Hydrogel Valve for Microfluidics", *Applied Physics Letters.*, 23 April 2001, pp. 2589-2591, **78- #17**, American Institute of Physics, USA	
	F	S. KAWATA, H. SUN, T. TANAKA and K. TAKADA, "Finer Features for Functional Microdevices", *Nature*, 16 August 2001, pp. 697-698, **412**, Macmillan Magazines Ltd., USA	
	G	K. ZAHN and G. MARET, "Two-dimensional Colloidal Structures Responsive to External Fields", *Current Opinion in Colloid & Interface Science*, 1999, pp. 60-65, **4**, Elsevier Science Ltd., United Kingdom	
	H	M. BÖHMER, "In Situ Observation of 2-Dimensional Clustering During Electrophoretic Deposition", *Langmuir*, 27 November 1996, pp. 5747-5750, **12- #24**, American Chemical Society, USA	
	I	J.D. DEBORD, S.EUSTIS, S.B. DEBORD, M.T. LOFYE and L.A. LYON, "Color-Tunable Colloidal Crystals from Soft Hydrogel Nanoparticles", *Advanced Materials*, 3 May 2002, pp. 658-662, **14- #9**, Wiley-VCH Verlag GmbH, Germany	
	J	R.C. HAYWARD, D.A. SAVILLE and I.A. AKSAY, "Electrophoretic Assembly of Colloidal Crystals with Optically Tunable Micropatterns", *Nature*, 2 March 2000, pp. 56-59, **404**, Macmillan Magazines Ltd., USA	
	K	R.E. KUSNER, J.A. MANN, J. KERINS and A.J. DAHM, "Two-Stage Melting of a Two-Dimensional Colloidal Lattice with Dipole Interactions", *Physical Review Letters*, 5 December 1994, pp. 3113-3116, **73-#23**, The American Physical Society, USA	
	L	R.E. KUSNER, J.A. MANN and A.J. DAHM, "Two-Stage Melting in Two Dimensions in a System with Dipole Interactions", *Physical Review B*, 1 March 1995, pp. 5746-5759, **51- #9**, The American Physical Society, USA	

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	M	G. PAN, R. KESAVAMOORTHY and S.A. ASHER, "Optically Nonlinear Bragg Diffracting Nanosecond Optical Switches", *Physical Review Letters*, 19 May 1997, pp. 3860-3863, **78- #20**, The American Physical Society, USA	
	N	A. RICHEL, N.P. JOHNSON and D.W. McCOMB, "Observation of a Bragg Reflection in Photonic Crystals Synthesized from Air Spheres in a Titania Matrix", *Applied Physics Letters*, 3 April 2000, pp. 1816-1818, **76- #14**, American Institute of Physics, USA	
	O	A.T. SKJELTORP, "One- and Two-Dimensional Crystallization of Magnetic Holes", *Physical Review Letters*, 19 December 1983, pp. 2306-2309, **51- #25**, The American Physical Society, USA	
	P	M. TRAU, D.A. SAVILLE and I.A. AKSAY, "Field-Induced Layering of Colloidal Crystals", *Science*, 3 May 1996, pp. 706-709, **272**, American Association for the Advancement of Science, USA	

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